AW-1. Manure Digesters/Other Waste Energy Utilization

Mitigation Option Description

[Insert text here]

Mitigation Option Design

[Insert text here]

- **Goals:**
- **Timing:**
- **Coverage of parties:**
- **Other:**

Implementation Mechanisms

[Insert text here]

Related Policies/Programs in Place

1. **Washington Department of Ecology Beyond Waste Plan**: Recommendation ORG 6, http://www.ecy.wa.gov/beyondwaste/p_org06.html.
2. **Energy Freedom Loan:**
   - **South Yakima Conservation District** – $2 million.
   - **Port of Sunnyside,** Dairy Anaerobic Digester -- $1,972,715
   - **Tulalip Tribes**, Qualco Dairy Digester -- $1,500,266
3. **Ecology / WSU partnership**: Supplemental funding continues research on high solids anaerobic digester, and biomass inventory.
   - **Producing Energy and Fertilizer** (high solids anaerobic digester). http://www.ecy.wa.gov/biblio/0707024.html
   - **Biomass Inventory Technology and Economics Assessment** http://www.ecy.wa.gov/biblio/0707025.html

Types(s) of GHG Reductions

[Insert text here]

Estimated GHG Savings (in 2020) and Costs per $MtCO_2e$

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

Contribution to Other Goals

- **Contribution to Long-term GHG Emission Goals (2035/2050):**
- **Job Creation:**
- **Reduced Fuel Import Expenditures:**

Key Uncertainties

[Insert text here]

Additional Benefits and Costs

[Insert text here]

Feasibility Issues

[Insert text here]

Status of Group Approval

TBD

Level of Group Support

TBD

Barriers to Consensus

TBD

AW-2. In-State Production of Biofuels and Biofuels feedstocks

Mitigation Option Description

[Increase the production and use of biofuels from biomass feedstocks available in-state.] Current research has identified the largest potential for in-state biofuel feedstock production from the following: underutilized forest biomass, carbon-based municipal waste, and agricultural field waste. Producing bio-ethanol or other bio-fuels from various waste streams has huge potential for reducing waste while producing biofuels, as opposed to a dedicated energy crop, which typically requires the use of fossil fuels, fossil-fuel based fertilizers and agrichemicals, and possibly energy for pumping irrigation water.

Regional or community fuel production sites have some benefits over the creation of large scale facilities that require shipment of out of state feedstocks to in-state processing facilities. This decentralized approach would also consider regional crop diversities in the scale of processing facilities that support Washington-grown, Washington-owned biofuels.

Mitigation Option Design

- **Goals:** *[CCS inserted examples for consideration below, based on ideas in text provided by volunteers]*
    - Increase in-state production of biodiesel feedstocks by x% by 2020 (note: these could be "GHG superior" feedstocks rather than traditional soybean e.g., canola and waste oil).
    - Increase in-state production of ethanol feedstocks x% by 2020. (note: these could be "GHG superior" feedstocks rather than traditional corn feedstocks e.g., cellulosic feedstocks and feedstocks from waste sources).
- **Timing:**
- **Coverage of parties:**
- **Other:** Carbon dioxide emissions represent 85% of total greenhouse gas emissions in 2000. Energy-related activities were responsible for 85% of the total carbon dioxide emissions, with the transportation sector as the largest source at 48.8 million tons (56% of the energy-related emissions). Gasoline was the main source, responsible for 51% of emissions; jet fuel at 22% and diesel fuel at 16% comprise other major sources.

  Pure biodiesel emits 78% less carbon dioxide, nearly 50% less particulates, and 80-90%

fewer cancer-causing compounds than petro-based diesel. According to an EPA report[1], it emits slightly higher levels of nitrogen oxide, estimated to be about 2% for soybean-based B20, a blend of 20% biodiesel and 80% petro-based diesel.

Ethanol has been proven to reduce carbon dioxide emissions in a full fuel cycle analysis conducted by numerous studies including those prepared by the Argonne National Laboratory and the National Renewable Energy Laboratory (NREL). NREL estimates that ethanol derived from cellulose decreases CO_2 emissions by 90 percent compared to gasoline.

Implementation Mechanisms

[Insert text here]

Related Policies/Programs in Place

Federal Incentives

The Energy Policy Act of 2005 provides federal incentives for consumers and businesses using biofuels. A summary of the Act's provisions and other federal incentives can be found at the Department of Energy's Alternative Fuels Data Center. The major provisions affecting biodiesel and ethanol include:

a. Small producer biodiesel and ethanol credit. This credit will benefit small agri-biodiesel producers by giving them a 10 cent per gallon tax credit for up to 15 million gallons of agri-biodiesel produced. In addition, the limit on production capacity for small ethanol producers increased from 30 million to 60 million gallons. This is effective until the end of 2008.
b. Credit for installing alternative fuel refueling property. Fueling stations are eligible to claim a 30% credit for the cost of installing clean-fuel vehicle refueling equipment, (e.g. E85 ethanol pumping stations). Under the provision, a clean fuel is any fuel that consists of at least 85% ethanol, natural gas, compressed natural gas, liquefied natural gas, liquefied petroleum gas, or hydrogen and any mixture of diesel fuel and biodiesel containing at least 20% biodiesel. This is effective through December 31, 2010. In May 2006, the Internal Revenue Service (IRS) published Form 8911, which provides a mechanism to claim the infrastructure tax credit. Owners who install qualified refueling property on multiple sites can utilize the credit for each property. The instructions define what is considered qualified property and the value of the credit. See IRS Form 8911.
c. Biodiesel and ethanol tax credit. Extends the tax credit for biodiesel producers established in the American Jobs Creation Act of 2004 (Public Law 108-357) through 2008. The tax credit is $.50 per gallon of waste-grease biodiesel and $1.00 for agribiodiesel. If the fuel is used in a mixture, the credit is 1 cent per

[1] U.S. Environmental Protection Agency, A Comprehensive Analysis of Biodiesel Impacts on Exhaust Emissions EPA-Draft Technical Report, EPA420-P-02-001, October 2002.

percentage point of agribiodiesel used or 1/2 cent per percentage point of waste-grease biodiesel. The American Jobs Act also established the Volumetric Ethanol Excise Tax Credit (VEETC), which provides ethanol blenders/retailers with $.51 per pure gallon of ethanol blended or $.0051 per percentage point of ethanol blended (i.e., E10 is eligible for $.051/gal; E85 is eligible for $.4335/gal). The incentive is available until 2010.

Washington State Incentives

Washington State also provides incentives to encourage the development of in-state production facilities, distribution services and retail sales facilities for biodiesel and ethanol fuels. In 2003, the Washington State legislature passed tax incentives for the manufacture and sale of biodiesel and ethanol. Detailed information on the 2003 state tax incentives for biofuels can be found at the Department of Revenue's Tax Incentive website. Highlights include:

- a reduction in the B&O Tax for manufacturers of biodiesel and ethanol fuels from from 0.484% to 0.138%; `
- an exemption from state and local property and leasehold taxes for a period of 6 years for buildings, equipment and land used in the manufacturing of alcohol fuel, biodiesel fuel, or biodiesel feedstocks; and,
- an exemption from retail sales and use tax for the purchase of machinery and equipment and the construction of facilities used directly for the retail sale of alcohol fuel or biodiesel fuel.

In 2006, the Washington State Legislature passed additional biofuels legislation including the Energy Freedom Fund and the Renewable Fuel Standard.

- The Energy Freedom Program

  The Energy Freedom fund includes the Energy Freedom Loan Account. This account is funded by $100 million from the State General Fund and managed by a 13-member Energy Freedom Board. The Board is responsible for establishing a competitive process for awarding low-interest loan and grants in research and development of new and renewable energy sources, including infrastructure, facilities, technologies and research and development that will advance Washington's move towards energy independence. Financial assistance may be awarded by the Board for: research and development of new and renewable energy and biofuel sources, including biomass, solar, and wind power; renewable energy and biofuel development infrastructure and facilities; and research and development to develop markets for alternative fuel byproducts. The Energy Freedom Program expires June 30, 2016. The Energy Freedom Program expires June 30, 2016. Details of the Energy freedom Fund can be found in RCW 15.110.

  The 2006 supplemental capitol budget provided $23 million to help fund biofuels projects, such as biodiesel and ethanol production facilities, oilseed crushers, and

anaerobic digesters. The bulk of the funds will be provided as low-interest loans, with the potential for some grant funding. Of the $23 million, $6 million was earmarked for Grays Harbor Pulp and Paper Company to install a biomass turbine, $10.25 million was earmarked for 5 biodiesel production or oilseed crushing projects selected by the Legislature. The remaining $6.75 million is available for open competition. A summary of project funding and current activity can be viewed at the Washington State Department of Agriculture Bioenergy website.

- Washington State Renewable Fuel Standard – ESSB 6508

  In 2006, the Washington State legislature passed a renewable fuel standard –ESSB 6508. The standard requires that at least 2% of the diesel sold in Washington must be biodiesel beginning November 30, 2008, or earlier, if a determination is made by the Director of the State Department of Agriculture that feedstock grown in Washington State can satisfy a 2% fuel blend requirement. The biodiesel requirement would increase to 5% once in-state feedstocks and oil-seed crushing capacity can meet a 3% requirement. At current fuel consumption levels, a 2 percent biodiesel requirement is equivalent to approximately 20 million gallons per year. Details on Washington's renewable fuel standard are contained in RCWs 19.112.110 to 19.112.180. The 2006 renewable fuel standard also requires that beginning on December 1, 2008, at least 2% of the gasoline sold in Washington be ethanol. The ethanol requirement could be increased to 10% if the Director of Ecology determines that this would not jeopardize continued attainment of Clean Air Act standards. At current fuel consumption levels, a 2 percent requirement is equivalent to approximately 55 million gallons of ethanol per year.

A sampling of other biofuel programs in the state include:

1. USDA-ARS/WSU bioenergy crops project, with field trials of various biofuel crops, including switchgrass (currently in its 4th year of production), soybeans, safflowers, camelina, mustard, canola, rapeseed, and others
2. Puget Sound Clean Cities Coalition, a public/private collaborative effort to promote alternative fuel vehicles and create a network of alternative fuel facilities
3. Brassica variety research trials initiated by the brassica breeding and research program at University of Idaho at numerous locations throughout the PNW

1. **Governor's Executive Order, 07-02**: http://www.governor.wa.gov/execorders/eo_07-02.pdf.
2. **Western Regional Climate Action Initiative:** http://www.ecy.wa.gov/climatechange/docs/07Mar_WesternRegionalClimateActionInitiative.pdf**.**
3. **Governor's Climate Change Challenge:** http://www.governor.wa.gov/priorities/environment/climate_brief.pdf.

4. **Community Trade and Economic Development--Energy Freedom Loan:**
   - **Spokane County Conservation District,** Palouse-Bio, LLC Biodiesel Processing Facility –$853,871
   - **Odessa Public Development Authority**, Inland Empire Oilseeds Biodiesel Facility – $848,102
   - **Port of Whitman County**, Integrated Seed Processing and Biodiesel Production – $778,869
   - **Port of Warden**, Integrated Seed Processing and Biodiesel Production – $415,397
   - **Port of Warden**, Biodiesel/Glycerin Production Project – $380,780

Additional loans to:
   - **Port of Warden** – $2.5 million
   - **Odessa Public Development Authority** – $2.5 million
   - **Port of Columbia County** – $2.5 million
   - **Spokane Conservation District** – $2 million
   - **Port of Sunnyside** – $750,000
5. **WSDA 07-09 Budget:** Sugar Beet as Biofuel--$125,000 to evaluate the use of sugar beets for producing biofuels.
6. **Ecology / WSU partnership**: Supplemental funding continues research on biomass inventory.
   - **Biomass Inventory Technology and Economics Assessment** http://www.ecy.wa.gov/biblio/0707025.html

Types(s) of GHG Reductions

[Insert text here]

Estimated GHG Savings (in 2020) and Costs per $MtCO_2e$

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

Contribution to Other Goals

- **Contribution to Long-term GHG Emission Goals (2035/2050):**
- **Job Creation:** new jobs in the biofuel industry including the production, processing, storage, and distribution of these fuels and their feedstocks.
- **Reduced Fuel Import Expenditures:**

Key Uncertainties

[Insert text here]

Additional Benefits and Costs

[Insert text here]

Feasibility Issues

Canola production for biodiesel: While canola is well suited for production in Washington State, large-scale production of this crop could be unrealistic due to concerns with cross-pollination or contamination of the valuable seed crop industry in the state. Early research also shows that canola is a host to several nematodes that affect potato production, so widespread rotation with potatoes may be inadvisable. While canola is more sensitive to winter kill and heat stress than cereal grains, it is also quite drought tolerant. Long-term variety trials have been conducted

around the region; this data will be invaluable for our production estimates.

One of the major challenges that exists at this time is the lack of technology to economically convert and ferment cellulosic feedstocks. Adoption of cellulosic ethanol has been limited by the high costs associated with converting vegetation into ethanol. The typical conversion process begins by grinding up the biomass, soaking it in water and adding an acidic pretreatment to separate it into its primary structural components: cellulose, hemicellulose and lignin. Enzymes are added to the mixture to break down the cellulose into its constituent sugars. The sugars are then fermented and finally distilled to create high-grade ethanol. Efforts to reduce the production costs are underway, including isolating and refining enzymes in an effort to speed up the conversion process.

Any biofuels consideration should take into account potential trade-offs of implementation. For instance, increasing landfill methane capture may not be viable if current and developing efforts to reduce carbon-based solid waste are successful; or, removal of field waste for biofuel generation may require additional soil amendments to be transported on to the fields, thereby potentially negating any carbon reduction gains.

Status of Group Approval

TBD

Level of Group Support

TBD

Barriers to Consensus

TBD

AW-3. Significantly Expand Source Reduction, Reuse, Recycling and Composting

Mitigation Option Description

[Insert text here]

Mitigation Option Design

[Insert text here]

- **Goals:**
- **Timing:**
- **Coverage of parties:**
- **Other:**

Implementation Mechanisms

[Insert text here]

Related Policies/Programs in Place

1. **Washington Department of Ecology Beyond Waste Plan**: Solid Waste Initiative, http://www.ecy.wa.gov/beyondwaste/SWIssues.html. Organics Initiative, http://www.ecy.wa.gov/beyondwaste/increaseOrganics.html.
2. **Electronic Product Recycling Program**: Manufactures required to provide recycling for covered electronics. http://www.ecy.wa.gov/pubs/wac173900.pdf.
3. **Ecology Coordinated Prevention Grants:** Available to local governments to develop and implement their hazardous and solid waste management plans. http://www.ecy.wa.gov/programs/swfa/grants/cpg.html.
4. **Ecology Public Participation Grants:** Public Participation Grants provide funding to citizen groups and not-for-profit public interest organizations to provide public involvement in monitoring the cleanup of contaminated sites and prevent pollution by reducing or eliminating waste at the source. http://www.ecy.wa.gov/programs/swfa/grants/ppg.html.

Types(s) of GHG Reductions

[Insert text here]

Estimated GHG Savings (in 2020) and Costs per $MtCO_2e$

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

Contribution to Other Goals

- **Contribution to Long-term GHG Emission Goals (2035/2050):**
- **Job Creation:**

- **Reduced Fuel Import Expenditures:**

Key Uncertainties

[Insert text here]

Additional Benefits and Costs

[Insert text here]

Feasibility Issues

[Insert text here]

Status of Group Approval

TBD

Level of Group Support

TBD

Barriers to Consensus

TBD

AW-4. Agricultural Carbon Management

Mitigation Option Description

Agriculture carbon sequestration uses agricultural crops and acreage to store carbon in biomass and soils. [*CCS suggests adding a few sentences describing how the actions in the goals will increase sequestration, e.g., Changes in soil management practices such as…., can prevent soil carbon losses and increase the amount of carbon sequestered in soils.…]*

Mitigation Option Design

- **Goals:**
- Increase soil carbon storage statewide in agricultural soils by xx MMtCO2e per year by 2020 by implementation of proven and novel technologies, such as reduced tillage, cover cropping, increased perennial cropping, use of biochar and other soil amendments, and alternatives to agricultural burning.
- Increase diversion of organic residuals and wastes from all sources (including municipal wastes) for land application on agricultural soils by x% per year. (*CCS suggested slight modification*)
- Expand use of agricultural crops and residuals for bioproducts that sequester carbon (e.g. fiberboard from straw) by x% by 2020. (*CCS suggested slight modification*)
- Increase vegetative standing biomass in agriculture [by x% or x acres per year] through use of woody crops, perennial grasslands, and improved rangeland management, thereby storing xx MMtCO2e. (*CCS suggested slight modification*)

- **Timing:**
- **Coverage of parties:**
- **Other:** There is additional potential to increase carbon sequestration through agriculture practices beyond what is explicitly stated in the goals above. However, there is not enough information currently available to fully develop policies in these areas: replace CO2 emitting practices with CO2 neutral practices in agriculture (e.g. generation of CO2 in greenhouses; crop drying); optimize carbon-cropping for the state's diverse bioregional specifications that reduction GHG emissions, sequester carbon, and allows a cash crop for farmer (e.g. food, fuel, or carbon crop); increase conversion of dryland acreage to irrigated acreage (this will increase carbon sequestration but will rely upon more water that may not be available due to existing water rights and potential reduction in hydro power, snowpack, and rainfall); organic cropping systems (additional research is needed to compare organic and conventional cropping systems for carbon sequestration using life cycle assessment techniques that include, but are not limited to, tractor/farm vehicle hours, fuel usage, source of any nutrient and pesticides, hauling of nutrients and

pesticides and respective application rates, and energy use from processing/conversion of crops for next stage use).

Implementation Mechanisms

- Engage in certification standards to maximize access to carbon markets from in-state agriculture (e.g. Chicago Climate Exchange eligibility). *[originally listed as goals]*
- Stable land resource programs that encourage long-term carbon sequestration on appropriate acreage. *[originally listed as goals]*
- Encourage regionally specific rotational/perennial crops that increase carbon sequestration and hold potential for economic gains. *[originally listed as goals]*
- Support existing USDA programs such as CRP, CSP, and EQUIP to expand successful adoption by producers. Expand programs that reduce risk and transition barriers (e.g. no-till drill rentals through conservation districts). Support research to develop novel techniques such as perennial wheat, biochar, and agriculturally-derived bioproducts.
- Explore policies to expand grass-based livestock production in the state, particularly through marketing Washington grown grass fed meat products.
- Work with agricultural producers to test alternatives to burning of agricultural residuals (e.g. bioenergy or bioproduct utilization). Partner with Ecology program.
- Develop conversion processes for bioproducts that can utilize crops and residuals from the state. Work with businesses to start new enterprises using these materials. Incorporate bioproduct specifications into state contracts (e.g. straw board for construction, compost and mulch for highway projects). Test adaptability of new crops such as switchgrass, kenaf, and hybrid willow for expanding production of agricultural biomass for bioproducts.
- Develop validated tools for calculating carbon credits from agriculture.

Related Policies/Programs in Place

USDA farm programs – EQIP, CRP, CSP
WA Ag Pilots Project
WSU Center for Bioproducts and Bioenergy (operations not funded)
USDA STEEP program for direct seeding; PNDSA grower organization
WSU perennial wheat breeding program
USDA-ARS agroecosystems project
USDA-ARS/WSU bioenergy crops project
WSDA alternatives to agricultural burning program
Conservation District programs – rental of direct seed drills
King County and other land application of biosolids programs
WDOE Beyond Waste program, Agricultural Burning Alternatives program

1. **Northwest Natural Resource Group (WA), $200,000.00:** Promoting Small Landowner Access to Emerging Carbon Sequestration Markets through Forest Certification, Aggregation, and Market Development. http://www.nnrg.org/.
2. **Washington Department of Natural Resources (DNR)**: DNR and WESTCARB produced an inventory of terrestrial carbon sequestration opportunities in Washington State.

Types(s) of GHG Reductions

Reduce emissions of CO2 from agricultural soils and increase C sequestration in soil.
Sequester agricultural carbon in bioproducts that would otherwise return to the atmosphere through normal decomposition of residues.
Sequester agricultural carbon in soil through biochar amendments, a product of gasification technology, and diversion of other suitable organic residuals.

Estimated GHG Savings (in 2020) and Costs per $MtCO_2e$

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

Contribution to Other Goals

- **Contribution to Long-term GHG Emission Goals (2035/2050):**
- **Job Creation:**
- **Reduced Fuel Import Expenditures:** Bioproducts can offset use of fossil fuel feedstocks. Gasification to make biochar is a source of bioenergy. Direct seeding reduces on-farm energy use by decreasing tractor fuel consumption.

Key Uncertainties

- Washington State lags the nation, and the US lags many other nations, in adoption of direct seed systems. Some of this is due to production risks where continued research may help resolve current problems. Another issue is investment risk in purchasing the new equipment needed.
- Biochar is untested in the diversity of soils in the state, so it is unknown whether benefits described elsewhere will occur here. Production of biochar is dependent on availability and deployment of gasification technology, for which there is no clear standard or leader at this time.
- The price of transport fuel will dictate the economic feasibility of moving large volumes of agricultural residuals to the place of beneficial use.
- How will increasing temperatures counteract our efforts to store soil C?
- There are still many uncertainties about the impact of specific farming practices on GHG. For example, the recent article by Hamilton et al. (2007) illustrates the uncertainty as to whether agricultural liming is a net source or sink for CO2, with significant implications for the GHG impact of various farming systems.

Additional Benefits and Costs

- Direct seed can lead to increased water infiltration and reduced sandblasting of crops, increasing profits. It can also protect water quality from sediment and agrichemicals, and air quality from dust. Initially direct seed may cost more due to increased fertilizer and pesticide use, and higher potential for crop loss.

- Use of organic amendments for fertilizer and soil quality helps position a farm for certified organic production where there are currently substantial price premiums for many crops grown in the state. There is currently a shortage of organic hay, and growing this crop would provide a financial boost to growers and support the use of perennial crops that can sequester carbon.
- A new strawboard process from WSU could open the market for this product. Excess straw, some of which is currently burned, could go to this product and be sequestered for 20-50 yr (whatever one uses for the life of a building).

Feasibility Issues

- The uniqueness of the state's agricultural diversity and variability must be considered in any agriculture carbon policy. Any such policy must be based off of sound research of our state's agricultural land and crops, and consider bio-regional differences in any recommendations.
- Overall sustainability is an important criterion for considering trade offs in benefits. For example, irrigating previous dryland acres for the purpose of sequestrating carbon will require using more water
- More investment is needed to develop carbon storage validation tools for both policy and carbon market use. Without such tools, viable agriculture mitigation efforts will be difficult.

Status of Group Approval

TBD

Level of Group Support

TBD

Barriers to Consensus

TBD

AW-5. Agricultural Nutrient Management

Mitigation Option Description

[Insert text here]

Mitigation Option Design

[Insert text here]

- **Goals:**
- **Timing:**
- **Coverage of parties:**
- **Other:**

Implementation Mechanisms

[Insert text here]

Related Policies/Programs in Place

[Insert text here]

Types(s) of GHG Reductions

[Insert text here]

Estimated GHG Savings (in 2020) and Costs per $MtCO_2e$

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

Contribution to Other Goals

- **Contribution to Long-term GHG Emission Goals (2035/2050):**
- **Job Creation:**
- **Reduced Fuel Import Expenditures:**

Key Uncertainties

[Insert text here]

Additional Benefits and Costs

[Insert text here]

Feasibility Issues

[Insert text here]

Status of Group Approval

TBD

Level of Group Support

TBD

Barriers to Consensus

TBD

AW-6. Reductions In On-Farm Energy Use and Improvements in Energy Efficiency

Mitigation Option Description

[Insert text here]

Mitigation Option Design

[Insert text here]

- **Goals:**
- **Timing:**
- **Coverage of parties:**
- **Other:**

Implementation Mechanisms

[Insert text here]

Related Policies/Programs in Place

House Bill 1303: http://www.leg.wa.gov/pub/billinfo/2007-08/Pdf/Bill%20Reports/House%20Final/1303-S2.FBR.pdf.

Types(s) of GHG Reductions

[Insert text here]

Estimated GHG Savings (in 2020) and Costs per $MtCO_2e$

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

Contribution to Other Goals

- **Contribution to Long-term GHG Emission Goals (2035/2050):**
- **Job Creation:**
- **Reduced Fuel Import Expenditures:**

Key Uncertainties

[Insert text here]

Additional Benefits and Costs

[Insert text here]

Feasibility Issues

[Insert text here]

Status of Group Approval

TBD

Level of Group Support

TBD

Barriers to Consensus

TBD

AW-7. Preserve Open Space/Agricultural Land

Mitigation Option Description

[Insert text here]

Mitigation Option Design

[Insert text here]

- **Goals:**
- **Timing:**
- **Coverage of parties:**
- **Other:**

Implementation Mechanisms

[Insert text here]

Related Policies/Programs in Place

[Insert text here]

Types(s) of GHG Reductions

[Insert text here]

Estimated GHG Savings (in 2020) and Costs per $MtCO_2e$

- **Data Sources:**
- **Quantification Methods:**
- **Key Assumptions:**

Contribution to Other Goals

- **Contribution to Long-term GHG Emission Goals (2035/2050):**
- **Job Creation:**
- **Reduced Fuel Import Expenditures:**

Key Uncertainties

[Insert text here]

Additional Benefits and Costs

[Insert text here]

Feasibility Issues

[Insert text here]

Status of Group Approval

TBD

Level of Group Support

TBD

Barriers to Consensus

TBD